

ABSTRACT

A method and system is disclosed for generating and detecting variable sequence PN codes. PN-Code sequence changes based on varying interceptor threat levels are generated at a rate fast enough to avoid exploitation while maintaining a reasonable correlation search window. The PN code sequence is phase shifted by N-chips based on the severity of the threat environment. A synchronized receiver demodulates the PN encoded signal by correlating over every possible phase of the PN code sequence. The receiver includes first and second correlators and threshold detectors adapted to detect PN signals with varying PN code sequence changes.